December 30, 1993

LOCAL AGENCY PAVEMENT PRESERVATION POLICY (LAPP)

COUNTY ENGINEERS/SUPERINTENDENT OF HIGHWAYS MUNICIPAL ENGINEERS CONSULTING ENGINEERS

#93-25

Effective January 1, 1993 the FHWA approved a request from IDOT that the department be exempt from FHWA review and oversight. This exemption is allowed under provisions of the Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA) and includes projects which are processed for federal authorization through the Bureau of Local Roads and Streets, except National Highway System (NHS) projects and projects developed by the City of Chicago. In addition to providing the exempt status, ISTEA also allows states to develop design standards and policies for non-NHS projects.

An exempt status task force with representatives from municipalities, counties and IDOT was formed to determine if any standards and/or policies should be developed for local agency projects. The task force developed a Local Agency Pavement Preservation (LAPP) policy. The LAPP policy addresses the repair and resurfacing of existing roadways and is intended to provide an "interim" improvement until a rehabilitation or reconstruction improvement can be funded. LAPP projects are eligible for MFT and/or federal funding.

Candidate projects will qualify for either Group I or Group II Categorical Exclusions. The LAPP approval form which is to be used for all LAPP candidate projects is attached to the policy. BLR form 5250, Local Project Development Report for Group II Categorical Exclusions and Design Approval, is not required for LAPP projects.

Please contact the District Office if you have any questions concerning this policy.

Very truly yours,

William T. Sunley, P.E.

Engineer of Local Roads and Streets

Bill Sunler

ccDistrict Engineers

Local Agency Pavement Preservation (LAPP) Policy. The LAPP policy addresses the repair and resurfacing of existing roadways on local agency system. Both urban and rural sections are covered by this policy. The LAPP policy is intended to provide an "interim" improvement until a rehabilitation or reconstruction improvement can be funded. Projects developed in accordance with this policy will be eligible for MFT and/or federal funding. The following guidelines should be used when determining a project's eligibility for LAPP.

- A project should be a part of a route which extends between logical termini. Rural segments of a project should be at least 1.6 km (1 mile) in length. Urban segments of a project should be at least on block in length with geometric continuity for contiguous blocks.
- 2. All projects must have met the department's design requirements for state or local routes at the time of initial construction. If the surface type has changed since the original construction, base thicknesses shall be verified as in (d) below. Design plans shall be on file and available to the department for review upon request. The districts will review projects to verify that all requirements are met. Highways and/or streets constructed under local agency's supervision, where the design plans and construction records are not available to the department, will require the following:
 - (a) A determination that the horizontal and vertical alignments do not deviate more than 15 km/hr (10 mph) less than the design speed required under current policy.
 - (b) A typical cross section showing existing and proposed work.
 - (c) A statement from the local agency's design engineer that adequate drainage exists and the proposed work will not negatively impact the pavement drainage capabilities.
 - (d) Records indicating adequate design thickness of base have been maintained or obtained with thickness reading at 230 meters (750 foot) intervals, alternating 2.5 meters (8 foot) left and right of the center line. If pavement widening exists, it is recommended that the widening thickness be verified by coring or other means.
- 3. Construction limits for rural type cross section shall be from the edge of the shoulder to the edge of shoulder. Provisions shall be made on rural type cross section to protect the surface edges by building up the shoulders with material equal or superior to existing shoulder material. Construction limits for urban type cross sections shall be from face of curb to face of curb. Work may be extended beyond the face of curb if accessibility ramps for sidewalks are desired and no acquisition of right-of-way is required. Efforts should be made on curb and gutter sections to retain the flow line of the gutter and adequate curb height.
- 4. The project should not have extensive load-related distresses. A maximum of 10 percent of the pavement area will be allowed to be patched for rigid, composite and full-depth bituminous concrete (hot-mix) pavements. A maximum of 20 percent of the pavement area will be allowed for base repair of conventional flexible pavements.

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- 5. Projects should have a minimum width of through lanes of 2.7 m (9 ft) for rural sections and 3.0 m (10 ft) for urban sections (centerline to edge of pavement when there is no parking lane). The minimum parking lane width allowed is 2.4 m (8 ft) including gutter flag.
- 6. Projects should be capable of providing a minimum service life of 8 years. Stage Construction will not be allowed. Current department pavement design procedures for local agencies should be used to verify the minimum service life which can be achieved. Falling Weight Deflectometer or Benkelman Beam analysis will also be acceptable methods of verifying minimum service life. A structural coefficient of between 0.15 and 0.20 will be allowed for seal coat buildups.
- 7. The use of milling, leveling binder, heat scarifying, planing or other methods of reestablishing the base cross slope is highly recommended for bituminous surfaces. The allowable leveling binder thickness is 20 mm (3/4 inch) at the highest point of the existing typical section.
- 8. Bituminous hot-mix surface course between 30 and 65 mm thick (1 1/4 and 2 1/2 inches) plus material needed to fill depressions and to correct crown and minor superelevation deficiencies may be placed upon the existing pavement surface. A cold-mix material will be allowed for use as a leveling binder. The cold-mix material mix design must be approved by the district office.
 - For pavements with and ADT of 400 or less, the use of cold-mix material or aggregate base course will be allowed to improve the existing base. The minimum cold-mix or aggregate base course thickness allowed will be 100 mm (4 in). An A-1 or A-2 surface treatment over the cold-mix material is required. An A-2 or A-3 surface treatment is required for the aggregate base material. The coefficients shown in FAPLHI figure 6-1 (Attachment 5-8L) shall be used to evaluate the structural value of the pavement and verify that the 8 year minimum service life requirement is met.
- 9. Shoulder slopes for rural type cross sections will be increased as a result of thickening the pavement structure. Through horizontal curves, the maximum "breakover" (algebraic difference between pavement and shoulder slopes) should not be greater than 10% where the shoulder width is 2 meters (6 feet) or wider. Where the shoulder width is less than 2 meters (6 feet), the maximum "breakover" shall be 12%.
- 10. Use of reflective crack control treatment for the existing longitudinal widening cracks is recommended.
- Projects involving geometric revisions (other than minor superelevation corrections), pavement widening and/or acquisition of right of way will not be eligible under this program.

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12. Bridges with insufficient structural capacity (less than H-15) may be gapped if they are included in the Multi-Year Improvement Program (MYP). Gapping is when the resurfacing is terminated prior to the bridge approach guardrail instead of adjacent to the bridge. For bridges that have a structural capacity of HS-15, resurfacing is optional.

Structurally sound bridge decks with poor riding quality or worn bituminous surfaces that would jeopardize the safety of the motorist or cause undue discomfort should be repaired and resurfaced. Resurfacing may be extended across decks with appropriate repairs (waterproofing recommended). If the bridge cannot safely carry the additional dead load resulting from resurfacing, it shall be gapped.

Projects with narrow bridges will not be allowed. A bridge width can not be less than the pavement width of the typical section included in the LAPP project. The local agency's design engineer has the option of addressing bridge curbs and of retrofitting bridge rails.

- 13. Projects with high accident histories will not be allowed unless they can be corrected by resurfacing or superelevation improvement. A "high accident history" is any site which the design engineer deems to have an abnormally high number of accidents for the traffic volume, geometric characteristics, posted speed limit, etc. When available, review of Accident Spot Maps Accident Summary Reports and Wet Weather Cluster Sites is recommended.
- 14. Only drainage work, including replacement, on cross road pipe culverts beneath the roadway and into the foreslopes will be allowed. Minimal ditch work at the cross road pipe culverts will be allowed to ensure adequate drainage.
- 15. Clear zone obstruction between the shoulder breaks must be addressed.

The approval form on the next page is to be used for all LAPP candidate projects, whether they qualify for a Group I or Group II Categorical Exclusion. Categorical Exclusion criteria are outlined on page 5-2-27 of the FAPLHI manual and will be revised in the future to include LAPP projects. LAPP projects that do not involve any "Potential for Unusual Circumstances" will qualify for a group I categorical exclusion. Group II projects will require attaching to the LAPP approval form, a written description of the "Potential for Unusual Circumstances" that may be encountered.

A location map is to be attached to the LAPP Approval Form.

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